

REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-30 are pending in this application. By this Amendment, Claims 10, 16 and 18 are amended; Claim 30 is added; and no claims are cancelled herewith. The features of new Claim 30 are supported by at least page 23, line 12 to page 24, line 7 in the specification. It is respectfully submitted that no new matter is added by this Amendment.

In the outstanding Office Action, Claims 10, 11, 18 and 19 were rejected under 35 U.S.C. § 112, second paragraph; Claims 1, 8 and 16 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 5,703,965 to Fu and U.S. Patent No. 5,426,673 to Mitra; Claims 2-4, 12, 13, 15, 20-22 and 24 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fu and Mitra and further in view of U.S. Patent No. 6,363,526 to Vlahos; Claims 9 and 17 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fu and Mitra and further in view of U.S. Patent No. 6,229,578 to Acharya; Claims 5-7, 10, 11, 14, 18, 19, 23 and 25-27 were indicated as including allowable subject matter; and Claims 28-29 were allowed.

With respect to the rejection of Claims 10, 11, 18 and 19 under 35 U.S.C. § 112, second paragraph, Claims 10 and 18 are amended to clarify the features of the claims. Accordingly, withdrawal of the rejection of the claims under 35 U.S.C. § 112 is respectfully requested.

With respect to the rejection of the claims under 35 U.S.C. § 103(a), independent Claims 1, 8 and 16 similarly recite, in part, obtaining density information of an edge unsharpened image from said original image by unsharpening said edge part using said edge information, obtaining coded density information by coding said density information of said edge unsharpened image, and obtaining said density information of said edge unsharpened image obtained by unsharpening said edge part of said original image.

Fu discusses that the input image array is decimated in both dimensions and the decimated and optionally precompensated image array is compressed by a conventional image compression algorithm, such as JPEG. The compressed, decimated image is transmitted via the transmission medium 104. In addition, edges are identified in the image and a file is created which identifies each of the edge pixels in the original image array, together with their color values. Since the edge information carries much of the perceptual information of the image, the edge file is encoded and the encoded edge file is transmitted to the destination and the edge file is decoded. As such, Fu does not discuss “obtaining density information of an edge unsharpened image from said original image by unsharpening said edge part using said edge information”, “obtaining coded density information by coding said density information of said edge unsharpened image”, and “obtaining said density information of said edge unsharpened image obtained by unsharpening said edge part of said original image.”

Mitra does not make up for the deficiencies of Fu. In particular, Mitra merely discloses that each frame of the image is edge-smoothed. Mitra is a discrete cosign transform-based image coding and decoding method. Mitra further discusses that prior to encoding, if the incoming video is an analog signal, it is sampled and converted to a digital data stream. Each frame of the image is pre-filtered, scaled to size, and edge-smoothed. Mitra does not suggest the above-mentioned features recited in Claims 1, 8 and 16. Again, there is teaching or suggestion for “obtaining density information of an edge unsharpened image from said original image by unsharpening said edge part using said edge information”, “obtaining coded density information by coding said density information of said edge unsharpened image”, and “obtaining said density information of said edge unsharpened image obtained by unsharpening said edge part of said original image.”

Further, neither Fu nor Mitra suggest extracting edge information which is binary information representing an edge part of said original image, converting the edge information which is binary information into a distance map including distance values between pixels of said edge part and other pixels, and obtaining density information of an edge unsharpened image from said original image by unsharpening said edge part using said distance map, as recited in new Claim 30.

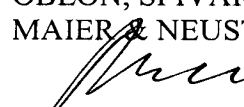
The remaining applied art does not make up for the deficiencies of Fu and Mitra discussed above. Accordingly, withdrawal of the rejections of the claims under 35 U.S.C. § 103(a) is respectfully requested.

Consequently, for the reasons discussed in detail above, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. Therefore, a Notice of Allowance is earnestly solicited.

Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact the undersigned representative at the below listed telephone number.

Respectfully submitted,

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